AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A balloon catheter comprising:

a catheter shaft having a distal end, an inflatable balloon disposed on the distal end, a proximal end coupled to a connecting piece, a guiding wire lumen extending between the proximal and distal ends within the catheter shaft, and an inflation lumen extending from the connecting piece to the inflatable balloon,

the guiding wire lumen being formed within the catheter shaft and from a proximal reinforcing pipe having a selectable length and a distal plastics pipe extending distally from a reinforcing pipe distal end~~having coupled proximal and distal portions disposed substantially concentrically within the catheter~~, the inflation lumen being formed between an exterior surface of the proximal reinforcing pipe and the distal plastics pipe and an interior surface of the catheter shaft,

the proximal reinforcing pipe and the distal plastic pipe~~portions~~ each being made of a solid material, the material of the proximal reinforcing pipe~~portion~~ being more rigid than the material of the distal plastic pipe~~portion~~, the proximal reinforcing~~portion of the~~ pipe including a friction reducing plastic tube disposed within a lumen thereof~~of the proximal portion~~,

wherein a transitional portion, transitioning the guidewire lumen from the proximal reinforcing pipe to the distal plastic pipe, between the proximal and distal ~~portions of the~~ pipes is provided with kink protection ~~at least partially~~ overlapping and being connected to the proximal and distal ~~portions of the~~ pipes~~, and~~

~~wherein the inflation lumen is defined by an annulus between an exterior of the pipe and an interior surface of the catheter shaft~~.

2.-3. (Canceled).

4. (Currently Amended) The balloon catheter according to claim 1, wherein the proximal portion comprises a metallic material ~~and the distal portion comprises a plastic material~~.

5. (Currently Amended) The balloon catheter according to claim 1, wherein the transitional portion comprises the abutting ends of the proximal reinforcing pipe and the distal plastic pipe ~~portions~~.

6. (Previously Presented) The balloon catheter according to claim 1, wherein the kink protection comprises a sleeve.

7. (Previously Presented) The balloon catheter according to claim 1, wherein the kink protection comprises a metal spring.

8. (Previously Presented) The balloon catheter shaft according to claim 7, wherein the metal spring is arranged in the inflation lumen.

9.-12. (Canceled).

13. (Previously Presented) The balloon catheter according to claim 4, wherein the plastic tube has a lubricity-enhancing coating.

14.-20. (Canceled).

21. (Currently Amended) A balloon catheter comprising:

a catheter shaft having a distal end including an inflatable balloon and a proximal end coupled to a connecting piece, the catheter shaft comprising ~~a pipe having proximal and distal portions disposed end to end, the proximal and distal portions of the pipe being coupled together by a sleeve that at least partially overlaps the proximal and distal portions of the pipe,~~ separate first and second boreholes extending longitudinally within at least a portion of the catheter shaft, ~~a friction reducing plastic tube being disposed within a lumen of the pipe and forming the first borehole,~~

~~wherein~~ the first and second boreholes extending from the proximal end toward the distal end, the first longitudinal borehole defining a guiding wire lumen and the second longitudinal borehole defining an inflation lumen that provides fluid communication between the connecting piece and the inflatable balloon, the guide wire lumen being formed within the catheter shaft and by a proximal reinforcing pipe having a selectable length and a distal plastic pipe extending distally from a reinforcing pipe distal end, the proximal reinforcing pipe~~portion~~ comprising a material having a greater rigidity than the distal plastic pipe~~portion~~, and

a transitional portion, transitioning the guidewire lumen from the proximal reinforcing pipe to the distal plastic pipe, between the proximal and distal pipes is provided with kink protection overlapping and being connected to the proximal and distal pipes.

22. (Currently Amended) The balloon catheter of claim 21, wherein the proximal reinforcing pipe ~~portion~~ comprises a metallic material ~~and the distal portion comprises a plastic material~~.

23. (Previously Presented) The balloon catheter according to claim 21, wherein at least the first borehole in the friction reducing plastic tube has enhanced lubricity.

24. (Currently Amended) A balloon catheter comprising:

a catheter shaft having a distal end including an inflatable balloon and a proximal end coupled to a connecting piece, the catheter shaft comprising a guide wire lumen extending from the proximal end to the distal end, the guide wire lumen being formed within the catheter shaft from a ~~first~~ proximal reinforcing pipe and a ~~second~~ distal plastic pipe disposed end to end with a ~~the~~ distal end of the proximal reinforcing pipe abutting a ~~the~~ proximal end of the distal plastic pipe, the distal plastic pipe extending distally from the distal end of the proximal reinforcing pipe, the proximal reinforcing pipe being coupled to the distal plastic pipe at a transition, the proximal reinforcing pipe including a friction reducing plastic tube disposed within the ~~first~~ proximal reinforcing pipe, and a kink protection being disposed about the transition and at least partially overlapping the proximal and distal pipes, and

an inflation or deflation lumen disposed between an exterior surface of the proximal reinforcing pipe and the distal plastic pipe and an interior surface of the catheter shaft

~~wherein separate first and second boreholes extend longitudinally within at least a portion of the catheter shaft, and~~

~~wherein the first borehole defines a guiding wire lumen and the second borehole defines an inflation lumen for connecting the connecting piece to the inflatable balloon, a portion of the first borehole being formed from a lumen of the friction reducing plastic tube~~.

25. (Currently Amended) The balloon catheter of claim 24, wherein the ~~first~~ proximal reinforcing pipe comprises a metallic material.

26. (Currently Amended) The balloon catheter according to claim 24, ~~wherein at least the first longitudinal borehole includes~~further including a lubricity-enhancing coating disposed in the guide wire lumen.

27. (Currently Amended) The balloon catheter according to claim 1, wherein the [[the]] plastic tube is applied to the inner wall of the proximal portion of the pipe.

28. (Previously Presented) The balloon catheter according to claim 27, wherein the outer surface of the plastic tube is modified by plasma treatment or corona treatment for increasing adherence at the inner wall of the proximal portion of the pipe.

29. (Previously Presented) The balloon catheter according to claim 27, wherein the plastic tube is provided with an outer adhesive layer.

30. (Previously Presented) The balloon catheter according to claim 27, wherein the plastic tube extends beyond the proximal portion and into at least a portion of the distal portion.

31. (Previously Presented) The balloon catheter according to claim 1, further comprising a nylon tube coating within the transitional portion, the nylon tube coating extending at least partially within the proximal and distal portions.

32. (Canceled).

33. (Previously Presented) The balloon catheter according to claim 24, wherein the kink protection comprises a metal spring.